

# HANSCOM AIR FORCE BASE

MASSACHUSETTS

## DECOMMISSIONING OF THE MINUTEMAN VILLAGE MOBILE HOME PARK AND RESTORATION OF THE SITE



## FINAL ENVIRONMENTAL ASSESSMENT

Prepared by:

**METCALF & EDDY** | AECOM

Prepared for:

**66 MSG/CE**

**Hanscom AFB**

**29 April, 2009**

<b>Report Documentation Page</b>			<i>Form Approved OMB No. 0704-0188</i>	
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>				
1. REPORT DATE <b>29 APR 2009</b>	2. REPORT TYPE	3. DATES COVERED <b>00-00-2009 to 00-00-2009</b>		
4. TITLE AND SUBTITLE <b>Final Environmental Assessment: Decommissioning of the Minuteman Village Mobile Home Park and Restoration of the Site Hanscom Air Force Base, Massachusetts</b>			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Metcalf &amp; Eddy / AECOM, 701 Edgewater Drive, Wakefield, MA, 01880</b>			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	18. NUMBER OF PAGES <b>45</b>	19a. NAME OF RESPONSIBLE PERSON



**FINAL ENVIRONMENTAL ASSESSMENT**  
**DECOMMISSIONING OF MINUTEMAN VILLAGE MOBILE HOME PARK**  
**AND RESTORATION OF THE SITE**  
**BEDFORD, MASSACHUSETTS**

1.0	Purpose and Need For Action .....	1
1.1	Introduction.....	1
1.2	Purpose and Need of the Proposed Action .....	2
2.0	Description of the Proposed Action and Alternatives.....	4
2.1	Proposed Action: Decommissioning of the Minuteman Village Mobile Home Park and Full Restoration of the Site .....	4
2.2	Alternatives .....	5
2.2.1	No Action.....	6
2.2.2	Partial Removal/Restoration Alternative .....	6
3.0	Affected Environment.....	7
3.1	Land Use .....	7
3.2	Utilities.....	8
3.2.1	Water Supply .....	8
3.2.2	Wastewater.....	8
3.2.3	Solid Waste .....	9
3.2.4	Electricity .....	9
3.2.5	Telecommunications .....	9
3.2.6	Natural Gas .....	10
3.3	Socioeconomic Conditions .....	10
3.4	Transportation.....	12
3.5	Noise .....	12
3.6	Air Quality .....	13
3.7	Geology and Soils .....	13
3.7.1	Geology.....	13
3.7.2	Soils.....	14
3.8	Surface Water and Groundwater.....	14
3.8.1	Surface Water.....	14
3.8.2	Groundwater .....	15
3.9	Floodplains.....	16
3.10	Biological Resources .....	16
3.10.1	Vegetation .....	16
3.10.2	Wetlands .....	17
3.11	Cultural Resources .....	17
3.12	Environmental Restoration Program/Hazardous Waste .....	18
3.12.1	Environmental Restoration Program (also called Installation Restoration Program) .....	18

3.12.2 Hazardous Waste .....	19
4.0 Summary of Anticipated Environmental Impacts.....	20
4.1 Land Use .....	20
4.1.1 Short-Term Impacts .....	20
4.1.2 Long-Term Impacts .....	20
4.2 Socioeconomic Conditions .....	21
4.2.1 Short-Term Impacts .....	21
4.2.2 Long-Term Impacts .....	21
4.3 Utilities.....	21
4.3.1 Short-Term Impacts .....	21
4.3.2 Long-Term Impacts .....	23
4.4 Transportation.....	23
4.4.1 Short-Term Impacts .....	23
4.4.2 Long-Term Impacts .....	24
4.5 Noise .....	24
4.5.1 Short-Term Impacts .....	24
4.5.2 Long-Term Impacts .....	24
4.6 Air Quality .....	25
4.6.1 Short-Term Impacts .....	25
4.6.2 Long-Term Impacts .....	25
4.7 Geology and Soils.....	25
4.7.1 Short-Term Impacts .....	25
4.7.2 Long-Term Impacts .....	26
4.8 Surface Water and Groundwater.....	26
4.8.1 Surface Water.....	26
4.8.2 Groundwater .....	27
4.9 Floodplains.....	27
4.9.1 Short-Term Impacts .....	27
4.9.2 Long-Term Impacts .....	27
4.10 Biological Resources .....	28
4.10.1 Vegetation.....	28
4.10.2 Wetlands .....	28
4.10.3 Wildlife .....	29
4.10.4 Threatened and Endangered Species .....	30
4.11 Cultural Resources .....	30
4.12 Environmental Restoration Progam/Hazardous Waste.....	30
4.12.1 Short-Term Impacts .....	30
4.12.2 Long-Term Impacts .....	31
5.0 Measures To Reduce Potential For Impact.....	32
6.0 References.....	34
7.0 List of Preparers.....	36

## FINDING OF NO SIGNIFICANT IMPACT

Name of Action: Decommissioning of the Minuteman Village Mobile Home Park and Restoration of the Site.

Hanscom AFB proposes to decommission the Minuteman Village Mobile Home Park (MVMHP) and restore the site to conditions similar to those prior to the construction of the MVMHP in 1961. The U.S. Air Force Materiel Command (AFMC) has directed all Air Force Bases under its command, including Hanscom AFB, to vacate all mobile home parks by 1 July 2009, in the Mobile Home Park Policy issued on 8 August 2004. A majority of the property (approximately 38 of the 44 acres) is leased to the Air Force by the Massachusetts Port Authority (Massport). The Air Force must fulfill the requirements set forth in the lease agreement in order to terminate the lease agreement for that parcel of land. The proposed action includes removing the aboveground and surface features associated with the MVMHP. Once the MVMHP is completely vacated, the proposed action includes disconnecting and capping all utilities. Lastly, the proposed action would backfill, grade, loam and seed all the sites.

The Environmental Assessment (EA) prepared for the proposed action addresses the site specific impacts of decommissioning the MVMHP and restoring the site to conditions similar to those prior to the construction of the MVMHP. The EA evaluates the consequences of the proposed action on both the natural and man-made environments. The proposed action would result in the property no longer functioning as a mobile home park, and the restoration of the site would result in the creation of open space/vacant land in an area that has been residential for nearly 50 years. The proposed action will be in accordance with the AFMC Mobile Home Park Policy and would fulfill the requirements set forth by Massport in the lease agreement.

The alternatives to the proposed action that were evaluated include: a) taking no action, and b) partial removal/restoration. None of these alternatives were determined to meet the needs of Hanscom AFB. The no action alternative would not be in accordance with the AFMC Mobile Home Park Policy and would not fulfill the requirements set forth by Massport in the lease agreement. In addition, no action would result in a less favorable environmental condition as the aboveground and surface features, and utilities would be left in-place. The partial

removal/restoration alternative would remove the remaining aboveground and surface features only on the parcel owned by Massport and similarly restore (loam and seed) only on the parcel that is owned by Massport. The aboveground and surface features on the parcel owned by the Air Force would not be demolished, utilities would remain in-place, and the former housing sites would not be loamed or seeded. The partial removal/restoration alternative is a less environmentally preferred alternative than the proposed action and has been eliminated.

If the decommissioning of the MVMHP and restoration of the site were to occur as proposed, no significant impacts associated with the land use, socioeconomic, transportation, noise, air quality, geology/soils, surface water and ground water, biological resources, or cultural resources would be anticipated. However, minor impacts may occur in the short-term. The demolition and site restoration activities have potential to affect adjacent land uses due to elevated noise levels, increased dust, minor interferences with roadway access, and visual effects. The decommissioning of the MVMHP would generate solid waste including items such as concrete fragments, scrap metal, and wood materials from former fencing, playgrounds, signs, mailboxes, bus stop shelters, and benches. All impacts are insignificant and can be minimized further by using the best management practices described in this EA.

There are a few positive impacts that would occur as a result of the preferred action. First, after the decommissioning of the MVMHP and restoration of the site is completed, a slight decrease in traffic volumes on Hartwell Road and on commuting routes from the MVMHP to Hanscom AFB would be anticipated. Also likely is a decrease in traffic volumes on the bus routes to/from the elementary, middle and high school that are currently provided to the residents at the MVMHP. Plus, a slightly reduced number of vehicles entering/exiting the base at peak commuting hours at the MIT, Hartwell, and Vandenberg gates on the base is anticipated. Another positive impact of the restored areas, comprised of gravel backfill and topsoil, will be higher infiltration rates, and thus the total volume of runoff from the site will be reduced. Also, the demolition of surface features will result in a slight increase in groundwater infiltration rates, which would support base flow to the Shawsheen River during prolonged dry periods.

Upon completion of the decommissioning and restoration activities, the site would be a vacant parcel of open space with no potential sources of hazardous materials. All aboveground oil tanks

would have been removed by the homeowner, and all electrical transformers would have been removed and disposed by Hanscom AFB, thereby eliminating a potential risk of oil leakage and associated contamination. In addition, there would no longer be an ongoing demand for potable water, wastewater collection, solid waste collection, telecommunications, or natural gas at the site, and there will be substantially reduced electric demand.

It is anticipated that the following best management practices would be followed during the decommissioning of the MVMHP and the restoration of the site. To minimize noise impacts, mufflers would be used on construction equipment and vehicles. In addition, all equipment and vehicles used during the decommissioning and restoration activities would be maintained in good operating condition so exhaust emissions are minimized, thus reducing the potential for air quality impacts. Dust would be controlled onsite by using water to wet down disturbed areas. Sedimentation controls would be installed to minimize offsite runoff that may contain suspended solids. Disturbed areas will be seeded and stabilized as soon as possible to reduce erosion of disturbed soil. Controls will be left in place until vegetation is established. All mature trees will remain and be protected during demolition and restoration. Most of the landscape plants/trees will remain in-place, and damage to plants would be minimized during the demolition stage. During demolition, all activities will be conducted in accordance with Hanscom AFB's best management practices (BMPs) to prevent adverse effects to receiving waters. Also, all hazardous materials used during construction would be handled and disposed of in accordance with Hanscom AFB policies and protocols and all applicable state and federal regulations.

Copies of the Draft EA/FONSI were made available for public review at the main public libraries in Bedford, Concord, Lexington, Lincoln, and at the Hanscom AFB Environmental Office, Building 1825, beginning on 28 November, 2008. Over thirty days were allowed for the public to comment on the Draft EA/FONSI. The public comment period ended on 5 January, 2009. Two comments were received on 11 and 13 December, 2008. The Environmental Office responded to these comments on 19 December, 2008. Neither of the comments modified or required revisions to the Final EA/FONSI.

Based on the detailed description of effects described in the Environmental Assessment for this proposed action, I have determined that the decommissioning of the MVMHP and the restoration of the site to conditions similar to those prior to the construction of the MVMHP will not have a significant impact on the natural or human environment.

CHRIS L. PERKINS, P.E.  
Base Civil Engineer

29 Apr 2009

Date

## **1.0 PURPOSE AND NEED FOR ACTION**

### **1.1 INTRODUCTION**

Since 1961, Hanscom AFB has operated the Minuteman Village Mobile Home Park (MVMHP) on land in the Southwest corner of Bedford, MA. It was initially constructed with 39 single-wide mobile home pads and later expanded to today's layout of 98 spaces encompassing 89 single-width and 9 double-width spaces for living quarters for Hanscom AFB enlisted personnel/officers. United States Air Force Materiel Command (AFMC) has directed all Air Force Bases under its command (which includes Hanscom AFB) to vacate all mobile home parks.

AFMC issued the Mobile Home Park Policy on 08 August 2004, which requires that all mobile home parks at Air Force Bases under AFMC leadership be vacated on or before 01 July 2009. Upon issuance of the policy, Hanscom AFB advised tenants of the impending closure of the mobile home park and as of 14 October, 2008, 51 tenants (52%) have already removed their mobile homes from the MVMHP.

As the MVMHP is vacated, Hanscom AFB proposes to remove the remaining aboveground and surface features of the property (43.73 acres) that are related to the presence of the mobile homes, including utilities, concrete pads, public transportation features, etc. A majority of the property (37.5 acres) is owned by the Massachusetts Port Authority (Massport) and leased to Hanscom AFB, and the remaining property (6.23 acres) is owned by the Air Force. After the aboveground and surface features are removed from the property, Hanscom AFB will then initiate restoration activities, prior to returning the property to Massport control in compliance with an existing lease agreement. The lease agreement for this particular parcel will ultimately be terminated.

This Environmental Assessment (EA) addresses the Proposed Action, the No-Action Alternative and the Partial Removal/Restoration Alternative in accordance with the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), Council on Environmental

Quality (CEQ, 1978) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] §§ 1500-1508), and 32 CFR 989 et seq., *Environmental Impact Analysis Process* (formerly known as Air Force Instruction [AFI] 32-7061). NEPA procedures were established to ensure environmental information is available to public officials and citizens before decisions are made and before actions are taken.

According to these instructions, the environmental assessment is a written analysis which serves to (1) provide analysis sufficient to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI); and (2) aid federal agencies in complying with NEPA when no EIS is required. If this EA were to determine the proposed action would significantly degrade the environment, significantly threaten public health or safety, or generate significant public controversy, then an EIS would be completed. An EIS involves a comprehensive assessment of project impacts and alternatives and a high degree of public input. Alternatively, if this EA results in a FONSI, then the action would not be the subject of an EIS. The EA is not intended to be a scientific document. The level and extent of detail and analysis in the EA is commensurate with the importance of the environmental issues involved and with the information needs of both the decision-makers and the general public.

This EA addresses the site-specific impacts of the removal and disposal of the aboveground and surface features of the MVMHP and restoring the site, and evaluates the consequences of the proposed action and alternatives on the natural and man-made environments.

## **1.2 PURPOSE AND NEED OF THE PROPOSED ACTION**

The purpose of the proposed action is to decommission the MVMHP and to restore the property in Bedford, MA to a useful condition. The need of the proposed action is two-fold. First, decommission of the MVMHP is required to comply with the Mobile Home Park Policy dated 08 August 2004 administered by AFMC. The policy requires that all AFMC Mobile Home Parks will be closed by 1 July 2009 and no waivers to this policy will be granted. The Air Force will have no use for the property after the park has been vacated; therefore, the area of the park will be restored to a more natural state. Second, the restoration of the MVMHP is based on

requirements of an existing lease agreement with Massport, which requires restoration of the parcel prior to terminating the lease.

## **2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

### **2.1 PROPOSED ACTION: DECOMMISSIONING OF THE MINUTEMAN VILLAGE MOBILE HOME PARK AND FULL RESTORATION OF THE SITE**

The proposed action is the removal of remaining aboveground and surface features associated with the Minuteman Village Mobile Home Park (MVMHP) after the tenants have vacated the property. The following activities are to occur: Remove and dispose of all concrete pads, runners and gravel to full depth at each individual site; remove and dispose of any fencing; remove walkways and other above ground features such as playgrounds, signs (not street signs), mailboxes, bus stop shelters and site benches; remove and dispose of electric and cable television transformers; and disconnect all utilities (water, gas, electric) and cut & cap at the utility main or as required by the local utility companies. After the aboveground and surface features are removed, then Hanscom AFB will re-grade using clean fill where required and subsequently loam and seed the sites.

As a condition of the Hanscom AFB Housing Policy, the mobile home owners are responsible for the proper removal of their existing oil tanks, including required permitting procedures through the Bedford Fire Department. Existing suspect soils in these locations are tested and remediated as part of the tank removal process. All removal, testing and disposal will be in compliance to Federal, State and local regulations.



Vacant lot currently at the Mobile Home Park

The proposed action will commence in the Fall of 2008 with the removal and disposal of the concrete pads, runners and gravel at vacant sites. As many existing vacated trailer pads as possible will be demolished as conditions allow. In July of 2009, after all the sites

have been vacated, the remaining trailer pads will be demolished, as well as the removal of the aboveground and surface features listed above.

When all removal and disposal activities are completed, then the loaming and seeding of the sites will take place. All work must be accomplished in compliance with the Massachusetts State Building Code, General Laws and the Massachusetts Contingency Plan.

As part of the routine demolition activities, all electrical transformers (whether located on a pad or mounted to a pole) will be tested for PCBs. Any transformer that tests positive for PCBs will be disposed of by Hanscom AFB in accordance with Federal and State hazardous waste regulations.



Bus stop shelter to be removed after 1 July 2009

Pad/ground mounted transformers that do not test positive for PCBs will be removed from the site and transported to Hanscom AFB where they may ultimately be reused. Pole mounted transformers, even if free of PCBs, will be removed and transported off-site for disposal.

## 2.2 ALTERNATIVES

Military personnel are in the process of vacating the mobile home park. At the time the mobile home park is vacated, Hanscom AFB would have three options: 1) remove the remaining aboveground and surface features associated with the former use as a mobile home park, and restore the land or 2) take no further action and thereby leave in-place all remaining aboveground and surface features associated with the former use as a mobile home park, or 3) remove the remaining aboveground and surface features associated with the former use as a mobile home park, and restore the land only on property owned by Massport, leaving the remaining portion on Air Force land in place.

- Option 1 is the Preferred Alternative, and thus the Proposed Action evaluated in this EA.
- Option 2 is the No Action Alternative, and is described in more detail below.
- Option 3 is the Partial Removal/Restoration Alternative, and is described in more detail below.

### **2.2.1 No Action**

The No-Action alternative consists of leaving in-place the concrete pads, fencing, walkways, aboveground features, transformers and utilities after the lots are vacated. If the no action alternative is used then all the utility lines would remain and may not be properly cut and capped. The potentially exposed utility lines and remaining transformers are potential risks of oil and natural gas leakage, releases, and associated soil and groundwater contamination. Also, the remaining street lights would result in unneeded electricity demand. In addition, the aesthetic character of the property would be very poor, because all the aboveground features, surface features and utilities would remain in-place. The preferred alternative would result in positive impacts regarding land use, transportation and groundwater. The no action alternative would not result in positive impacts to the natural or the man-made environment. This action will not be in accordance with the Mobile Home Park Policy dated 08 August 2004 administered by AFMC, and it will not fulfill the requirements set forth by Massport in the lease agreement and the Air Force would have to provide Massport with compensation for not meeting the requirements. For these reasons, the no action alternative is not being considered any further.

### **2.2.2 Partial Removal/Restoration Alternative**

The Partial Removal/Restoration Alternative consists of removing the remaining aboveground and surface features associated with the former use as a mobile home park (including utilities), and loaming and seeding the sites on the property that is owned by Massport. No further action would be taken and all remaining aboveground and surface features associated with the former use as a mobile home park, including utilities, would be left in-place in the property owned by the Air Force. Similar to the no action alternative, the potentially exposed utility lines and remaining transformers left in-place would be potential risks of oil and natural gas leakage, releases, and associated soil and groundwater contamination. Also, the remaining street lights would result in an unneeded electricity demand. In addition, the aesthetic character of the property would be very poor, because all the aboveground, surface features and utilities would remain in-place. For these reasons the partial removal/restoration alternative is not being considered any further.

### 3.0 AFFECTED ENVIRONMENT

The existing environmental conditions evaluated in this EA are described to provide a baseline against which potential impacts related to the decommissioning and restoration of pre-existing conditions at the Minuteman Village Mobile Home Park (MVMHP) can be determined. General conditions on the property used for the MVMHP are presented for each of the parameters and site-specific detail is included, as available.

#### 3.1 LAND USE

The MVMHP is located within the southern part of Bedford, approximately 20 miles northwest of Boston, Massachusetts, just outside the Route 128/I-95 circumferential expressway. The MVMHP occupies approximately 44 acres of relatively flat land, and provides 98 pads for mobile homes along its three primary interior driveways: Shaw Circle, McDill Road, and Independence Court; all of which are accessed from Hartwell Road (HAFB, 2004).



Aerial Photo of MVMHP

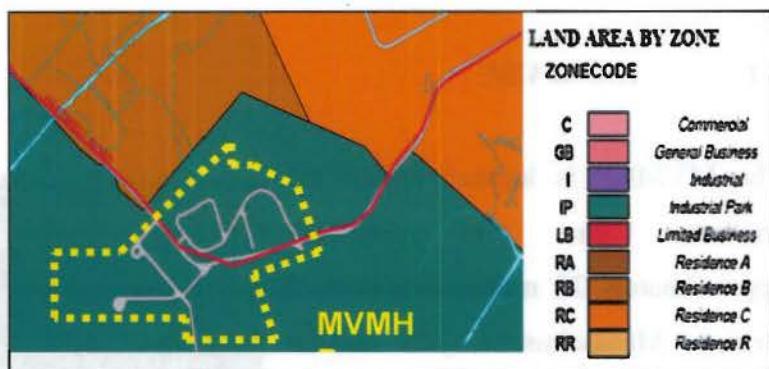
The land uses surrounding the MVMHP are primarily industrial, both active and vacant, and include:

- Hanscom Field airport operated by the Massport to the south.
- Unoccupied buildings comprising the former Naval Weapons Industrial Reserve Plant (NWIRP) owned by the U.S. Department of the Navy to the north, east, and south (HAFB, 2008a).

- A remotely-operated groundwater (Superfund) treatment facility associated with the former Navy activities to the north (HAFB, 2008a).

- Vacant industrial/commercial buildings owned by Instrumentation Laboratory Company and NAI Hunneman Commercial Real Estate Services, Worldwide to the west (TOB, 2008).

Despite its residential nature, the MVMHP is situated within a portion of Bedford zoned for Industrial Parks. The nearest residentially zoned areas include the Residence B district (30,000 square feet minimum lot size)



bordering to the north and the Residence C district (25,000 square feet minimum lot size) bordering to the northeast (EOEA, 2001).

### 3.2 UTILITIES

#### 3.2.1 Water Supply

Potable water is supplied to the MVMHP by the Town of Bedford. Bedford residents receive potable water from two sources, a local supply of groundwater and a distant surface water source (Quabbin Reservoir) from the Massachusetts Water Resources Authority (MWRA). In 2007, the wells provided 12.1% of the total inventory of 505.8 million gallons of water used by Bedford residents (MWRA, 2008). Water distribution lines are located belowground within Shaw Circle, McDill Road and Independence Court (HAFB, 2008b).

#### 3.2.2 Wastewater

Sanitary sewage generated within the MVMHP is collected by sanitary sewer lines that run under Independence Court and belowground behind the lots in Shaw Circle and McDill Road (HAFB,

2008b). The sewage is conveyed to the Hanscom AFB collection system via a single sanitary sewer line, which flows by gravity to the Hanscom AFB lower pumping station (HAFB, 2008c).

From Hanscom AFB, the wastewater is discharged to the MWRA collection system via a 12-inch force-main down Hartwell Avenue which connects to a 20-inch force main from the Town of Bedford. The capacity of the wastewater line is limited to 1,500 gallons per minute (gpm) or 2.16 million gallons per day, by an agreement with the Town of Bedford and the MWRA, in part because of limitations at Bedford's Great Road Pumping Station. Wastewater flows from Hanscom AFB generally have averaged slightly more than half this maximum permitted capacity (HAFB, 2003).

### **3.2.3 Solid Waste**

The family housing generates a typical residential waste stream that includes food, newspaper, cardboard, cans, glass containers, plastic containers and yard waste. An average of 84 containers (approximately 35 gallons each) of solid waste is generated per month at the MVMHP (HAFB, 2008d). Solid wastes are removed from the MVMHP by a private contractor and disposed of by incineration or directly hauled to materials recovery facilities for recycling. (HAFB, 2008e)

### **3.2.4 Electricity**

The MVMHP obtains electrical power supply from NStar (formerly Boston Edison). Nearly all transmission lines within MVMHP are aboveground. There are six pad-mounted transformers and four pole-mounted transformers located throughout the MVMHP. There is no backup or emergency power at the MVMHP (HAFB, 2008f).

### **3.2.5 Telecommunications**

In addition to standard dial-up telephone service, many mobile homes at the MVMHP have cable service for television and broadband internet. All telecommunication lines are aboveground.

### **3.2.6 Natural Gas**

National Grid supplies the natural gas to the MVMHP. Thirty-six mobile homes in the MVMHP currently are heated via natural gas. Natural gas is also used for domestic hot water and gas cooking ranges. The natural gas distribution lines run under Hartwell Road and Independence Court, and underground behind residences between Hartwell Road and Shaw Circle, and between Shaw Circle and McDill Road (HAFB, 2008b).

## **3.3 SOCIOECONOMIC CONDITIONS**

Hanscom AFB operates the MVMHP, at no cost to the USAF with the use of lot fees to cover all expenses. Due to the high cost of housing in the Boston Metropolitan area, the MVMHP was initially envisioned as a low-cost housing alternative for junior airmen in the event that Military Family Housing (MFH) was unavailable. The MVMHP was initially constructed in 1961 with 39 single-width mobile home pads. The facility was later expanded to the present configuration of 89 single-width and 9 double-width pads. The park is located on two parcels of land; one parcel is leased from Massport, and the other parcel is owned by the USAF (HAFB, 2004).

The occupancy consisted of slightly more officers than enlisted personnel in 2004. Of the resident officers, 50% were married. Of the resident enlisted personnel, approximately 38% were married (HAFB, 2004). Eligibility and assignment to the MVMHP are governed by AFI 32-6001 Family Housing Management (FHM). The personnel assigned to the MVMHP have the right and responsibility for maintaining the lot assigned by the Base Commander (HAFB, 2004).

The workforce at Hanscom AFB includes military (active-duty), government civilian, and contractors, representing a combined total of approximately 5,700 jobs. Hanscom AFB's annual budget approaches \$4 billion. The government (military, civilian) payroll is approximately \$252 million, with an additional \$795 million to contractors. The total regional economic impact of Hanscom AFB is estimated to be \$2.9 billion (HAFB, 2005).

Demographic data from the most recent United States Census data (year 2000) are provided at both a site-specific and regional level (see Table 3.3-1). The MVMHP is located within the US

Census Tract 3593, Block Group (BG) 9. Limited statistical information is available for the specific block group (US Census, 2000). While BG 9 contains a larger minority population (by percentage) than the whole of Tract 3593, the minority percentage is still notably lower than that for the county and state. There were 318 units identified in BG 9 with 92.8% of the units being owner-occupied. Only 7.2% of the units were rental, and 1.9% of all units (owner-occupied and rental) were vacant. The percentage of rental units in the whole of Tract 3593 was much higher at 17.5%, but the vacancy rate for all units was similar at 1.7%. The incidence of owner-occupied property for the state is notably lower, at 60.1% for the county and 57.5% for the state due to the inclusion of urban areas such as Metropolitan Boston. The median household income for Tract 3593 is significantly higher than the surrounding county and state (US Census, 2000).

Table 3.3-1: US Census Data for Massachusetts State, Middlesex County, Tract 3593, and Block Group 9 (US Census, 2000)

		State of MA:	Middlesex County:	Tract 3593:	Block Group 9:
General:	Total Persons:	6,349,097	1,465,396	6,972	888
	Percent Male:	48.2%	48.4%	49.4%	51.7%
	Percent Female:	51.8%	51.6%	50.6%	48.3%
	Land Area:	10,555mi <sup>2</sup>	848mi <sup>2</sup>	N/A	N/A
	Mean travel time to work	27.0	27.4	25.0	N/A
Ethnic:	Percent Caucasian:	84.5%	85.9%	90.8%	85.8%
	Percent African American	5.4%	3.4%	1.7%	3.3%
	Percent Native American	0.2%	0.2%	0%	0%
	Percent Asian/Pacific Islander	3.8%	6.3%	5.4%	7.9%
	Percent Hispanic/Latino <sup>a</sup>	6.8%	4.6%	1.8%	2.6%
	Percent Other	3.7%	2.1%	0.4%	1.2%
	Total Minority Percent	16.2%	14.5%	8.9%	13.8%
Housing	Total units:	2,621,989	576,681	2,612	318
	Owner-occupied units:	1,508,052	346,529	2,110	295
	Renter-occupied units	935,528	214,691	457	17
	Vacant units:	178,409	15,461	45	6
Income <sup>b</sup> :	Median household income	\$50,502	\$60,821	\$87,319	N/A
	Median family income	\$61,664	\$74,194	\$100,626	N/A
	Per capita income	\$25,952	\$31,199	\$38,009	N/A
	Number below poverty level	573,421	92,705	112	N/A
	Percent below poverty level	6.7%	6.5%	1.6%	N/A

a. Hispanic and Latino of any race.

b. 1999 US Dollars

### **3.4 TRANSPORTATION**

The majority of the automobile traffic near the MVMHP occurs on Hartwell Road. The traffic entering/exiting the MVMHP is generally attributed to MVMHP's residents commuting to/from Hanscom AFB for work or commuting to/from local schools and area businesses. Vehicles can enter/exit the MVMHP north of Hartwell Road via Shaw Circle at two locations, and at McDill Road. Vehicles can enter/exit the MVMHP south of Hartwell Road via Independence Court.

The most direct way to Hanscom AFB from the MVMHP is via Hartwell Road (northeast), to South Road (south), to Summer Street (east), Summer Street turns into Maguire Road, and then Hartwell Avenue (southwest) which leads to the Hartwell Gate at the Base. MVMHP commuters contribute to the traffic congestion that occurs in the vicinity of the base in peak morning periods as workers arrive from Route 4/225 and the local and regional highway system.

Another direct route to Hanscom AFB from the MVMHP is via Hartwell Road (northwest), to Route 62 (southwest), to Old Bedford Road, to Virginia Road, to Old Bedford Road which leads to the Vandenberg Gate at the Base. This route is less congested during peak morning hours because there is no additional congestion caused by commuters that travel on RT 4/225. However, there may be some congestion caused from commuters that use Route 2A and/or the local and regional highway system.

### **3.5 NOISE**

While some noise is generated by the residential activities within the MVMHP, such as lawn care equipment, local traffic movement, and playing children, the ambient noise environment is heavily influenced by noise sources originating outside MVMHP. The primary contributors of noise in the vicinity of the MVMHP include the normal operation of Massport's Hanscom Field airport, military flights at Hanscom AFB, commercial/industrial abutting land uses, and automobile traffic along Hartwell Road and nearby local roads. Even though military flights constitute approximately 1% of the total aircraft operations in the vicinity, military flights tend to be noisier aircraft, and Massport calculates that military flights represent 11% of the aircraft-generated noise (HAFB, 2003).

### **3.6 AIR QUALITY**

The MVMHP (and Hanscom AFB) is located in an attainment area for the following criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM10 and PM2.5). However, the entire state of Massachusetts is designated by the US EPA as non-attainment for ozone (MassDEP, 2007). Ozone results from photochemical reactions in the atmosphere involving precursor pollutants such as Volatile Organic Compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>). In 1997, US EPA established a stricter ozone standard of 0.08 ppm averaged over as 8-hour period, but implementation was delayed due to legal challenges to the standard. US EPA designated Massachusetts as “moderate non-attainment” for the 8-hour standard effective June 2004. The Massachusetts Department of Environmental Protection (MassDEP) is developing an 8-hour Ozone State Implementation Plan (SIP) which includes strategies for achieving an attainment status for the 8-hour ozone standard by 2010.

The primary stationary emission sources at the MVMHP are individual heating systems that burn fuel oil or natural gas. The primary mobile sources of emissions in the vicinity include aircraft operation at Massport’s Hanscom Field, along with ground vehicles on local and/or base roadways and small combustion engines (e.g. lawn mowers, leaf blowers).

### **3.7 GEOLOGY AND SOILS**

#### **3.7.1 Geology**

Hanscom AFB and surrounding areas of Bedford, including the MVMHP, are located in an area that was occupied by a Pleistocene-age lake known as Glacial Lake Concord. The series of rounded hills and valleys that exist in the area are the result of bedrock structure and glacial erosion (HAFB, 2007). Exposed areas of bedrock are found in the highly elevated outlying areas. Most of Hanscom AFB and the MVMHP is underlain by Andover granite. The present extent of the Glacial Lake Concord deposits outlines the lower elevated area in which Hanscom AFB and the MVMHP is situated. The glaciolacustrine (lake bed sediments) that formed the bottom of Glacial Lake Concord were evenly distributed over thousands of years, and comprise the

MVMHP property. The deposits within the MVMHP property are classified as low stage deposits (Koteff, 1964).

### **3.7.2 Soils**

The soils at the MVMHP have been substantially disrupted by construction and earth-moving activities. The National Resource Conservation Service (NRCS) identifies most of the soils on the MVMHP site as a combination of Udorthents (soils altered by earth-moving activities) and/or Urban Land Complexes (soils mostly covered by impervious surfaces) (NRCS, 2008). The specific soil composition of the MVMHP site is provided in Table 3.7-1, below.

Table 3.7-1: Approximate NRCS soil composition for MVMHP property.

<b>Soil Type:</b>	<b>Area:</b>	
	(acres)	(as %)
Udorthents, loamy	16.3	37.3
Udorthents-Urban land complex	12.6	28.9
Urban land	9.2	21.1
Udorthents, sandy	5.2	11.8
Deerfield loamy sand (0 to 3% slopes)	0.5	0.9

## **3.8 SURFACE WATER AND GROUNDWATER**

### **3.8.1 Surface Water**

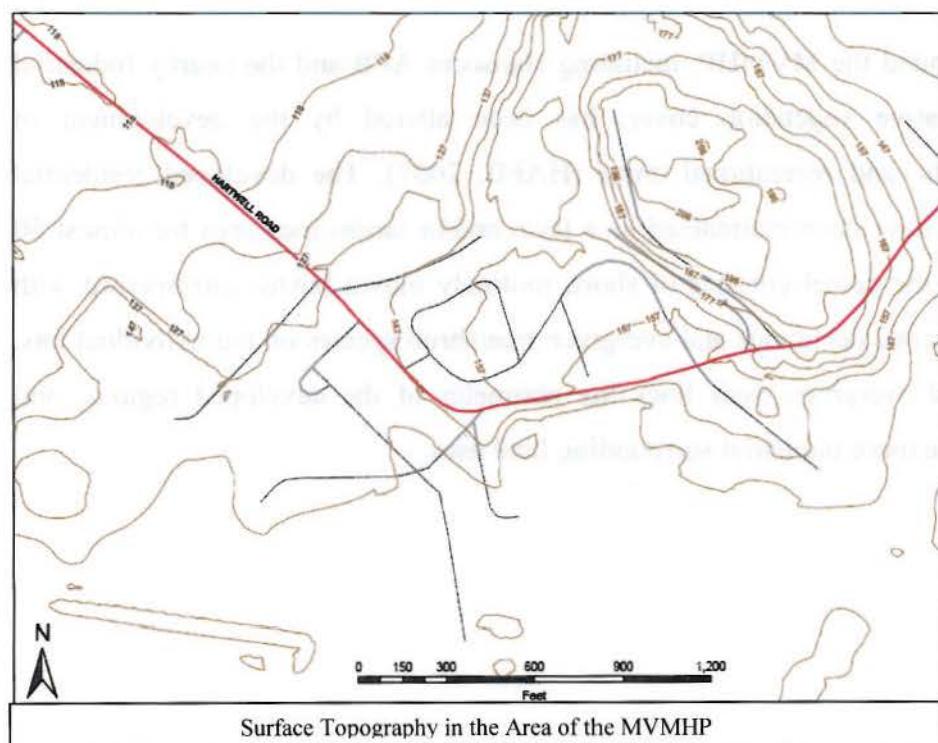
The MVMHP is situated within the Shawsheen River Watershed. The closest surface water body to the MVMHP is Elm Brook, located approximately 1,000 feet to the west and north. Elm Brook flows north into the Shawsheen River, itself a tributary to the Merrimack River (USGS, 2008). Runoff from the MVMHP, as with drainage from Hanscom AFB, enters the Shawsheen River either directly or through a tributary (HAFB, 2007). The Shawsheen River has been designated by MassDEP as a Class B water body and, as such, is protected as habitat for fish, other aquatic life and wildlife, and for primary and secondary contact recreation (HAFB, 2007).

The Merrimack River watershed is rated by US EPA as having high vulnerability to water quality problems. Watershed data suggests significant pollution or other stressors are present; therefore, the watershed has a high vulnerability to decline in aquatic health. Significant

watershed concerns identified by the Merrimack River Watershed Council include seasonally low baseflow, flash flooding, and water quality impairment (HAFB, 2007).

### 3.8.2 Groundwater

Site specific groundwater investigations have not been conducted at the MVMHP; however, given the MVMHP's proximity to Hanscom AFB, the general groundwater conditions are anticipated to be similar to those identified at Hanscom AFB. The groundwater at Hanscom AFB is fairly shallow, averaging 10 to 20 feet below ground surface (bgs), and is commonly encountered from 3 to 7 feet bgs near wetlands, in the lower elevations of the base, or during periods of seasonally high groundwater elevation. Flow in the upper aquifer is mostly controlled by surface drainage features and storm drainage systems. Groundwater flow in the lower and bedrock aquifers typically follow the topography of the area. The point of highest elevation on the MVMHP property is roughly in the vicinity of the northernmost corner; at elevation approximately 167 feet. The property slopes to the south and to the west down to approximately elevation 127 feet. It is anticipated that groundwater would flow south and west from the MVMHP, as the northern portion of Hanscom AFB adjoining the MVMHP property is at an approximate elevation between 117 feet and 127 feet (USGS, 2008).



Localized areas of groundwater contamination have been identified in the vicinity of the project, but not within the MVMHP itself. Since the 1990s, the USAF has been operating a groundwater remediation system to address contamination from former fire training activities which released waste oils, solvents, paint thinners, and degreasers to the soil and groundwater. The Navy also remotely operates a nearby groundwater treatment facility associated with the former Navy activities to the north of the MVMHP.

### **3.9 FLOODPLAINS**

As noted in Section 3.8, the nearest surface water to the MVMHP is Elm Brook. Along portions of its length, Elm Brook has 100-year floodplain extending beyond its banks, as depicted by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for Bedford. The nearest floodplain area to the MVMHP is located along Elm Brook, approximately 1,000 feet to the north and west of the property. No portion of the 100-year or 500-year floodplains is located within the MVMHP site (FEMA, 2008).

### **3.10 BIOLOGICAL RESOURCES**

#### **3.10.1 Vegetation**

Most of the land area around the MVMHP, including Hanscom AFB and the nearby Industrial Park, along with its native vegetation cover, has been altered by the development of buildings/facilities, streets, and recreational areas (HAFB, 2007). The developed residential portions of the MVMHP have been maintained as a lawn and/or landscaped area for almost 50 years. Vegetation within the parcel consists of short, routinely mown lawns, interspersed with occasional common landscape deciduous and evergreen tree/shrub species on the individual lots. A row of deciduous and evergreen trees lines the perimeter of the developed regions, and functions as a buffer to the more industrial surrounding land uses.

### **3.10.2 Wetlands**

According to the MassDEP Geographical Information Systems (GIS) wetland data and United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), there are no delineated wetland resources within the property of the MVMHP. However, according to the Town of Bedford wetland mapping, two small wetlands areas are located within the MVMHP property. The wetlands appear forested. One mapped wetland is at the very northern point of the USAF property north of 1 North Shaw Circle, and the other mapped wetland is located in the undeveloped part of the Massport property west of 120 Independence Court. Both sites are less than an acre in size, and are situated more than 100 feet from any of the existing mobile home pads (Town of Bedford, 2008).

## **3.11 CULTURAL RESOURCES**

The Hanscom AFB region contains areas of prominent prehistoric and historic importance. There are hundreds of properties listed in the records of the Massachusetts Historical Commission (MHC) for the four towns surrounding Hanscom AFB, including Bedford. None of these properties, however, are located within or adjoining the MVMHP property (TOB Historical Society, 2008). The Minuteman National Historical Park (included on the National Register) and the Great Meadows National Wildlife Refuge are each located over one mile from the MVMHP.

An Architectural Building and Inventory Survey conducted for Hanscom AFB concluded that the MVMHP, which was first constructed in 1961, does not have a significant, unique link to any Cold War era event, and has been determined to not be eligible for inclusion in the National Register of Historic Places (PAL, 2003).

A Phase I Archaeology Survey conducted for Hanscom AFB concluded that there are no significant prehistoric resources within the developed portion of the MVMHP (HAFB, 1997). Moreover, the MVMHP site has been significantly disturbed for the installation of roadways, utilities, and residential pads; these past activities further lessen the potential for extant undisturbed cultural resources to be present at the site.

### **3.12 ENVIRONMENTAL RESTORATION PROGRAM/HAZARDOUS WASTE**

#### **3.12.1 Environmental Restoration Program (also called Installation Restoration Program)**

Hanscom AFB has historically used, generated, and disposed numerous hazardous substances, including fuel, aromatic solvents, PCBs, and chlorinated solvents. In 1984, environmental studies identified 13 sites, related to past practices at Hanscom AFB, warranting further investigation and potential cleanup through the Installation Restoration Program (IRP). Subsequent discoveries increased the number of sites to 22. Each site was evaluated using the Air Force Hazard Assessment Rating Methodology (HARM), which evaluates potential receptors, waste characteristics, and migration pathways in order to determine the relative potential of uncontrolled hazardous waste disposal facilities to cause health or environmental damage. HARM scores ranged from 86 (high hazard potential) to 6 (small hazard potential). Of the 22 identified potentially contaminated sites, 8 are still active and are either regulated by the US EPA under CERCLA or by the Commonwealth of Massachusetts.

One of the active sites, IRP Site1, is southeast of the MVMHP. IRP Site 1 is located northwest of Runway 5-23 at the north end of the airfield and was reportedly used from the late 1960s through 1973 for fire training exercises. Waste oils, solvents, paint thinners, and degreasers were collected from around the base, dumped into pits, ignited, and then extinguished. Occasionally, aircraft wrecks and fuselages were burned in the pits. Two separate pits were used over the years for training exercises. The size of each pit was estimated to be 15 feet by 20 feet. Contaminated soils were excavated from IRP Site 1 and transported to disposal facilities in 1988. The excavated areas were then backfilled with clean fill material and, since April 1991, a groundwater remediation system has been in operation to address residual groundwater contamination at IRP Site 1 (HAFB, 2008a).

Throughout the IRP investigation and remediation phases, no evidence has been found to show that the MVMHP has been impacted by the IRP site (HAFB, 2008a).

### 3.12.2 Hazardous Waste

Hanscom AFB maintains and implements a Hazardous Waste Management Plan, and a Pollution Prevention Plan, targeted at reducing the purchases of industrial toxic substances, eliminating the purchase of ozone depleting chemicals, and reducing the amount of hazardous waste disposed. Potentially hazardous household wastes from the MVMHP including paints, stains, used oil, waste gasoline, propane canisters and unused lawn fertilizers/pesticides are transferred to a 90-day accumulation site on Hanscom AFB, where they are inventoried and properly packaged prior to disposal at an approved off-base facility.

Currently, there are nine 275 gallon double-wall steel fuel oil tanks on the MVMHP property. As a condition of the Hanscom AFB Housing Policy (HAFB, 2008f), the mobile home owners are responsible for removal of their existing oil tanks and associated required permitting procedures through the Bedford Fire Department when they vacate the property. All removal, testing and disposal will be in compliance to Federal, State and local regulations.

In addition, within the MVMHP there are six pad mounted and four pole mounted electrical transformers that may contain PCBs (HAFB, 2008b).

## **4.0 SUMMARY OF ANTICIPATED ENVIRONMENTAL IMPACTS**

The proposed action would involve the decommissioning of the Minuteman Village Mobile Home Park (MVMHP) and restoration of the site to conditions that existed prior to its construction in the 1960s. Potential impacts associated with the proposed action may result during either/both the decommissioning and restoration components and could result in changes to the natural and human environment, in both the short and long term, as described in this section.

### **4.1 LAND USE**

#### **4.1.1 Short-Term Impacts**

Demolition and site restoration activities have the potential to affect adjacent land uses due to elevated noise levels, increased dust, minor interference with roadway access, and visual effects. Given the distance to occupied buildings outside the MVMHP, as well as their industrial/commercial nature, dust and noise impacts to the adjacent land uses are anticipated to be minimal.

#### **4.1.2 Long-Term Impacts**

As a result of the decommissioning, the project area would no longer function as a mobile home park. The restoration of the site would result in the creation of open space/vacant land in an area that has been residential for nearly 50 years. The conversion of residential land to open space is consistent with terms of the lease agreement with Massport, and will enable the Air Force to terminate the lease for this parcel of land.

## **4.2 SOCIOECONOMIC CONDITIONS**

### **4.2.1 Short-Term Impacts**

A slight short-term increase in the revenue generated in the surrounding area may occur due to construction employees utilizing local businesses for supplies and personal use. However, the scale of the MVMHP demolition activity is rather small, and a portion of the work will be conducted by contractors already employed by Hanscom AFB. Therefore, an economic benefit may not be perceptible, but there would be no adverse impacts to the socioeconomic conditions that characterize the MVMHP and its immediate surroundings.

### **4.2.2 Long-Term Impacts**

The long-term socioeconomic impacts from the decommissioning of the MVMHP and restoration of the site are expected to be minor. Before the notice to vacate was given, the MVMHP housed 98 families. All households would have consisted of at least one AF serviceperson. Several lots have now been vacated, and the remainder will soon follow. The military personnel (and families) displaced from the MVMHP have been assigned high priority for vacancies at on-base housing provided within Hanscom AFB. If there are no vacancies within the 784 on-base housing units, or if the individual/family elects not to live on-base, there is an ample supply of residences, for rent or purchase, within the communities surrounding Hanscom AFB; however, affordable housing can be difficult to find.

## **4.3 UTILITIES**

### **4.3.1 Short-Term Impacts**

#### **4.3.1.1 Water Supply**

Demolition activities may utilize the local water supply for dust control, although this function may alternatively be provided by mobile water tanks filled off-site. The potential use of the local water supply for dust control is not anticipated to have an adverse effect of other users along the

distribution line, in part, because many of the residents of the MVMHP have already vacated, and thus the current daily water demand is considerably less than the available capacity.

#### **4.3.1.2 Wastewater**

No short-term impacts on wastewater facilities are anticipated as a result of the decommissioning and restoration activities. The existing wastewater laterals connected to the mobile homes will be capped as the residents leave and there is no longer a need for these services. Portable toilets may be available for the demolition/construction workers, and waste would be transported to a nearby treatment facility.

#### **4.3.1.3 Solid Waste**

The decommissioning the MVMHP would generate solid waste, primarily associated with demolition materials. Waste material that is not suitable for reuse or recycling would be disposed of. The solid waste generated would include items such as concrete pads, fencing, walkways, playgrounds, signs (not street signs), mailboxes, bus stop shelters, and site benches. All solid waste would be handled in accordance with standard Hansom AFB procedures. Any hazardous materials would be disposed in accordance with state and federal regulations (see Section 4.11).

#### **4.3.1.4 Electricity**

As part of the demolition, electrical power service will be disconnected at the street and all transformers will be removed. Individual service connections would be also removed and/or capped. Short-term disruption of power to the immediate area around the MVMHP may occur while disconnections are made, if necessary to ensure the safety of workers.

#### **4.3.1.5 Telecommunications**

decommissioning and restoration of the site

Similarly, telephone and cable utilities would be cut and removed, or capped. No impact of telecommunications services in the surrounding area is anticipated during the demolition of the MVMHP.

#### **4.3.1.6 Natural Gas**

decommissioning and restoration of the site

Individual natural gas service connections and meters will be removed, and the natural gas distribution lines will be capped. Shallow excavation for removing concrete pads and other surface features is not anticipated to impact existing natural gas lines.

### **4.3.2 Long-Term Impacts**

decommissioning and restoration of the site

Following the decommissioning of the MVMHP and restoration of the site, some capped utility infrastructure will remain in place, but there would no longer be an ongoing demand for potable water, wastewater collection, solid waste collection, telecommunications, or natural gas at the site. Street lights and poles on the south side of the MVMHP that provide power to the airfield will be left in-place, but all other street lights and poles on both the south and north sides will be removed. There will be substantially reduced electric demand.

## **4.4 TRANSPORTATION**

decommissioning and restoration of the site

#### **4.4.1 Short-Term Impacts**

decommissioning and restoration of the site

Impacts to local roads within Bedford during demolition and restoration activities are anticipated to be minor. While there would be a short-term increase in heavy truck traffic on Hartwell Road and other connecting roadways, this is somewhat offset by the reduction in commuter traffic that has resulted from the decreased occupancy within the MVMHP. Personal and commercial vehicles operated by the contractors and subcontractors are not expected to have an adverse impact on the roadways.

#### 4.4.2 Long-Term Impacts

After the decommissioning of the MVMHP and restoration of the site is completed, a slight decrease in traffic volumes on Hartwell Road and on both commuting routes from the MVMHP to Hanscom AFB would be anticipated. The school bus services for the elementary, middle and high school that are currently provided to the residents at the MVMHP would cease and this would reduce traffic along the bus routes. Some current MVMHP residents will relocate into family housing on Hanscom AFB and this would slightly reduce the number of vehicles entering/exiting the base at peak commuting hours at the MIT, Hartwell, and Vandenberg gates on the base.

### 4.5 NOISE

#### 4.5.1 Short-Term Impacts

The decommissioning of the MVMHP and restoration of the site would result in elevated noise levels as the removal the aboveground and surface features occur, and as natural landscaping is restored. These elevated noise levels, which would be short-term in duration, are not likely to disrupt activities in the vicinity of the MVMHP, since existing noise levels are strongly influenced by proximity to the flightline.

#### 4.5.2 Long-Term Impacts

Upon decommissioning of the MVMHP and restoration of the site, the site would no longer function as a residential area. Previous noise sources associated with the MVMHP, such as HVAC systems, automobiles, and small engines (e.g. lawn movers, leaf blowers) would no longer be present. Thus, a small decrease in ambient noise levels may be perceptible.

## **4.6 AIR QUALITY**

### **4.6.1 Short-Term Impacts**

The decommissioning of the MVMHP may result in short-term localized air quality impacts. All construction (i.e. demolition) vehicles and some equipment would produce emissions that could temporarily affect air quality. The demolition activities have the potential to generate fugitive dust, particularly during demolition of concrete pads and excavation of surface features. Similarly, restoration activities, inclusive of material loading and transfer (gravel and topsoil), and grading also have the potential to generate fugitive dust. Dust would be controlled onsite by using water to wet down disturbed areas. Moreover, the number of vehicles and the duration of decommissioning and restoration required to perform the work is limited. Emissions are therefore not anticipated to cause an adverse impact to regional air quality.

### **4.6.2 Long-Term Impacts**

Following the decommissioning of the MVMHP, previously stationary and mobile air emissions sources such as oil or natural gas-fired heating systems, automobiles, and small power equipment (lawn mowers, leaf blowers) would no longer be present within the parcel. Thus, a small localized decrease in emissions may be realized, although the net effect on a regional basis is anticipated to be status quo, since many of the emissions sources would disperse and relocate to the military families' new homes, either on base or in the surrounding communities. The action does not require a federal conformity determination, as the direct and indirect emissions would not approach the thresholds identified in 40 CFR Part 51 (e.g. annual ozone emissions of 100 tons per year).

## **4.7 GEOLOGY AND SOILS**

### **4.7.1 Short-Term Impacts**

The demolition of the MVMHP will require soil disturbance. The shallow concrete pads that have served as foundations for the mobile homes or as bases for equipment (such as

transformers) will be removed. It is anticipated that this demolition will require excavation to a depth of no more than two feet. The resultant holes will be backfilled with clean gravel and then a layer of topsoil to complete the surface restoration. Sedimentation controls would be installed to minimize the erosion of disturbed soils. Controls would be left in place until vegetation has become established on disturbed soil.

#### **4.7.2 Long-Term Impacts**

No significant long-term impacts on the existing soils or geology are anticipated from the demolition of the MVMHP. The proposed activities will restore surface features to a condition comparable to those which existed prior to the construction of the MVMHP in the 1960s.

### **4.8 SURFACE WATER AND GROUNDWATER**

#### **4.8.1 Surface Water**

##### **4.8.1.1 Short-Term Impacts**

Since no surface water features are located on the MVMHP property, it is not anticipated that the demolition and site restoration activities would directly affect surface water resources. However, since the project will require surface disturbance and there will be periods when bare soil is exposed, the potential exists for ground to erode and be carried directly or indirectly into Elm Brook, located 1,000 feet to the north and west, during heavy rainfall or rapid snowmelt. During demolition, all activities will be conducted in accordance with Hanscom AFB's best management practices (BMPs) to prevent adverse effects to the receiving waters.

##### **4.8.1.2 Long-term Impacts**

No significant, long-term impacts on surface waters are anticipated. The demolition of surface features such as concrete slabs will result in a slight decrease of impervious surface. The restored areas, comprised of gravel backfill and topsoil, will have higher infiltration rates, and thus the total volume of runoff from the site will be reduced. Albeit small, compared to the size

of the overall Shawsheen drainage basin, the reduction of peak stormwater flows is a benefit to localized potential water quality problems.

#### **4.8.2 Groundwater**

##### **4.8.2.1 Short-term impacts:**

The proposed demolition activities, which are not anticipated to require excavation to a depth of more than two feet below ground surface, are not anticipated to intersect the groundwater table. Similarly, the restoration activities are not anticipated to have any adverse effect on groundwater.

##### **4.8.2.2 Long-term impacts:**

As noted above, the demolition of surface features will result in a slight increase, albeit small, in groundwater infiltration rates, which would support base flow to the Shawsheen River during prolonged dry periods. The project would not, however, have any adverse impact on the ongoing long-term groundwater projects being conducted nearby by the USAF and Navy.

#### **4.9 FLOODPLAINS**

##### **4.9.1 Short-Term Impacts**

As the project is not located within the floodplain, and would not result in the storage/stockpiling of any demolition or construction materials within a floodplain, no adverse impacts are expected.

##### **4.9.2 Long-Term Impacts**

The decommissioning and restoration will not result in the alteration of any floodplain. Given the project's reduction of impervious surfaces and the associated reduction in stormwater runoff rates, no adverse flooding impact is anticipated.

## **4.10 BIOLOGICAL RESOURCES**

### **4.10.1 Vegetation**

#### **4.10.1.1 Short-term**

Demolition activities will be limited to developed portions of the property. Mature trees will have protective barriers placed around them to minimize the potential for damage. Smaller trees and shrubs may be cleared incidental to other demolition activities; and existing grassy vegetation is likely to be disturbed by track-mounted construction equipment. Given the limited size of the project area, and the planned restoration activities (noted in Section 4.10.1.2), the short-term loss of some vegetation is not anticipated to substantially impact the biological community on, or in the vicinity of, the MVMHP parcel.

#### **4.10.1.2 Long-term**

Following demolition, any holes resultant from the excavation of concrete pads or other surface features would be backfilled and overlain with topsoil. A perennial lawn grass seed mixture will be broadcast, and the site is expected to be restored to permanent vegetative cover on nearly all non-pavement surfaces. After the USAF effectively terminates the lease of this parcel, thereby returning it to Massport control, the USAF will no longer routinely mow/maintain the vegetation. In the absence of routine mowing, the grassy vegetation may take on characteristics similar to a meadow or an abandoned pasture.

### **4.10.2 Wetlands**

#### **4.10.2.1 Short-term**

As indicated in Section 3.10.2, there are no wetlands within the developed portion of the MVMHP, where the demolition activities are proposed. The wetland areas identified on the Town of Bedford wetland mapping are more than 100 feet from any of the proposed activities, and are not anticipated to be impacted by the proposed action. During demolition activities, as

well as during the loam/seed restoration work, erosion and sedimentation controls may be installed around catchbasins or near drainage swales to further minimize the potential for adverse impact to wetland resources.

#### **4.10.2.2 Long-term**

No loss of wetland resources would occur from the proposed activities. The two small mapped wetland areas on the property are located outside the limits of work, and will not be directly affected. The reduction in human activities at the MVMHP may indirectly result in slight changes to runoff patterns or nutrient loading (e.g. runoff containing excess fertilizers), although this beneficial impact, if any, would be minimal.

### **4.10.3 Wildlife**

#### **4.10.3.1 Short-term**

As stated in Section 3.10.3, the MVMHP site does not provide significant habitat for wildlife due to its developed condition, routine maintenance/landscaping activities, and human traffic. While some brief displacement of small individual mammals, reptiles, and birds may occur, demolition activities are not expected to substantially affect any extant wildlife populations, which likely are accustomed to periodic intrusions because of the developed nature of the MVMHP and adjacent airfield operations.

#### **4.10.3.2 Long-term**

Following the restoration, it is possible that in the absence of human activity, the site of the former MVMHP may become more suitable wildlife habitat as it is allowed to revert to a more undeveloped state. However, the habitat surrounding the site, including Hanscom AFB and the adjoining industrial park, remains largely fragmented. Thus, a slight increase in wildlife diversity and/or abundance may be achieved, but no significant changes in wildlife population dynamics would be expected.

#### **4.10.4 Threatened and Endangered Species**

No threatened or endangered species are expected to be encountered within or adjacent to the MVMHP parcel; therefore, no impacts (either short or long term) are anticipated to result from the decommissioning and restoration activities.

### **4.11 CULTURAL RESOURCES**

Because no cultural resources are known to exist at, or adjacent to, the MVMHP, no short-term or long-term impacts to cultural resources are anticipated to result from decommissioning and restoration activities on the MVMHP property.

### **4.12 ENVIRONMENTAL RESTORATION PROGRAM/HAZARDOUS WASTE**

#### **4.12.1 Short-Term Impacts**

Prior to the proposed action, the individual owners of each mobile home are responsible for removal of their existing oil tanks, in accordance with procedures of the Bedford Fire Department. During the oil tank removal (which is not part of the USAF's proposed action), any suspect soil in the vicinity of aboveground storage tanks (ASTs) would be tested. The homeowner is responsible for any remediation, if necessary, associated with their oil tank. It is anticipated that all removal, testing and disposal of ASTs will be in compliance to federal, state and local regulations.

During decommissioning and restoration activities, hazardous materials would likely be used and generated including, equipment fuel, engine oil, hydraulic oil, grease and other equipment operation and maintenance material. Refueling of equipment may also take place within the MVMHP.

As part of the demolition activities, all electrical transformers (whether located on a pad or mounted to a pole) will be tested for PCBs. Any transformer that tests positive for PCBs will be disposed by Hanscom AFB. Any hazardous materials used during the decommissioning and

restoration of the MVMHP would be used, stored, transported and disposed in accordance with state and federal regulations.

The decommissioning of the MVMHP and restoration of the site to conditions representative of those prior to the construction of the MVMHP are not expected to have an adverse effect on ongoing Environmental Restoration activities at either the nearby USAF IRP site or the Navy Superfund site.

#### **4.12.2 Long-Term Impacts**

Upon completion of the decommissioning and restoration, the site would be a vacant parcel of open space with no potential sources of hazardous materials. All aboveground oil tanks would have been removed by the homeowner, and all electrical transformers would have been removed and disposed by Hanscom AFB, thereby eliminating a potential risk of oil leakage and associated contamination. The decommissioning and restoration would have no adverse long-term effects on the nearby Hanscom AFB's Environmental Restoration Program remediation site, nor on the Navy's remotely operated groundwater treatment facility.

## 5.0 MEASURES TO REDUCE POTENTIAL FOR IMPACT

While some impacts to the natural and human environment may occur during the decommissioning and restoration of pre-existing conditions at the Minuteman Village Mobile Home Park (MVMHP), these impacts are minor and are not atypical compared with other construction, decommissioning, or restoration projects. Commonly applied Best Management Practices and other measures, identified below, further reduce the likelihood that these activities would have a significant impact on the environment.

Parameter:	BMP or Other Measure to Reduce Impact:
Land Use	A phased construction schedule will be implemented to reduce peak traffic/noise levels and thus minimize disruption to nearby land uses.
Transportation	Transportation of heavy trucks would only be allowed during normal business hours to avoid the disturbance of surrounding residential areas.
Utilities	Contractors would take caution while performing shallow excavation for removing concrete pads and other surface features to avoid disturbing any underground utility lines. Also, they would ensure utilities are properly capped to prevent releases/outages.
Solid Waste	Solid waste management would be in compliance with Hanscom AFB recycling policies to minimize the amount of solid waste disposed without beneficial reuse, during both decommissioning and restoration.
Noise	Noise levels generated by typical construction equipment used during decommissioning and restoration may be reduced by installing mufflers and engine jackets.
Air Quality	All equipment and vehicles used during construction would be maintained in good operating condition so that exhaust emissions are minimized. Dust will be controlled on-site by using water to wet down disturbed areas.
Surface Water	During demolition, all activities will be conducted in accordance with Hanscom AFB's best management practices (BMPs), including installation of erosion and sediment controls, where appropriate, to prevent adverse effects to receiving waters.
Geology/Soil	Controls such as the use of mulch, hydroseeding with a tackifier, and/or installation of silt fences would be used to minimize erosion of disturbed soil. Controls will be left in place until vegetation is established.
Vegetation	All mature trees will be protected during demolition and restoration. Protection would include installing fencing (temporary) that extends out to the drip line of the trees and prohibits all equipment and/or storage of materials within the fenced area for the duration of the project. Most of the landscape plants/trees will remain in-place, and damage to plants will be minimized during the demolition stage. Additional loam and seed will be placed to increase vegetative cover.

<b>Parameter:</b>	<b>BMP or Other Measure to Reduce Impact:</b>
Hazardous Waste	All hazardous materials used or encountered during construction, demolition, or operation would be handled and disposed in accordance with Hanscom AFB policies and protocols and all applicable state and federal regulations.

## 6.0 REFERENCES

AFMC/CC. 2004. Air Force Material Command (AFMC) Mobile Home Park (MHP) Policy. August 2004.

Commonwealth of Massachusetts: Executive Office of Environmental Affairs (EOEA). 2001. Accessed at <http://appraisercentral.com/st/Bedford-Zoning.pdf>.

Council on Environmental Quality (CEQ), 1978. Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. 40 CFR Parts 1500-1508. November 28. 1978 (and as updated through July 1, 1998).

Federal Emergency Management Agency (FEMA). 2008. Map Service Center accessed at <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>

Hanscom AFB (HAFB). 1998. General Plan – Hanscom Air Force Base. Prepared by Michael Baker Jr, Inc. October 1998.

Hanscom AFB (HAFB). 2003. General Plan Update – Hanscom Air Force Base. Prepared by Parsons Brinckerhoff Quade & Douglas, Inc. November 2003.

Hanscom AFB (HAFB). 2004. Personal communication via email between (L. Munson) and (J. Maravelias), Re: Talking Paper, June 17, 2004.

Hanscom AFB (HAFB). 2005. Fact Sheet – Hanscom Air Force Base; Re: economic impact on the surrounding community. Accessed at <http://www.hanscom.af.mil/library/factsheets/factsheet.asp?id=7493>.

Hanscom AFB (HAFB). 2007. Integrated Natural Resources Management Plan for Hanscom Air Force Base – Draft. Prepared by LEC Environmental Consultants, Inc. September 2007.

Hanscom AFB (HAFB). 2008a. Personal communication between Tom Best, Environmental Restoration Program manager(Hanscom AFB Base Civil Engineer Government Office (GO)) and J. Maravelias, M&E|AECOM, regarding the Installation Restoration Program, November 5, 2008.

Hanscom AFB (HAFB). 2008b. Personal communication between Anthony Palmacci, IAP Worldwide Services (Hanscom AFB's Civil Engineering support contractor) and J. Maravelias, M&E|AECOM, regarding the location of utilities at the Minuteman Village Mobile Home Park (MVMHP), November 3, 2008.

Hanscom AFB (HAFB). 2008c. Personal communication between Joseph Philbrick, IAP Worldwide Services (Hanscom AFB's Civil Engineering support contractor) and J. Maravelias, M&E|AECOM, regarding wastewater management at the Minuteman Village Mobile Home Park (MVMHP), November 5, 2008.

Hanscom AFB (HAFB). 2008d. Personal communication between William Bellacini, IAP Worldwide Services (Hanscom AFB's Civil Engineering support contractor) and J. Maravelias, M&E|AECOM, regarding solid waste generation at the Minuteman Village Mobile Home Park (MVMHP), November 5, 2008.

Hanscom AFB (HAFB). 2008e. 2007 Solid Waste Facility Report – Hanscom AFB. 14 February 2008.

Hanscom AFB (HAFB). 2008f. Personal communication with Maria Ynostroza, IAP Worldwide Services (Hanscom AFB's Civil Engineering support contractor) and J. Maravelias, M&E|AECOM, regarding the housing policy at the Minuteman Village Mobile Home Park (MVMHP).

Koteff, C. 1964. Surficial Geology of the Concord Quadrangle. U.S. Geological Survey. Map GQ-331.

Massachusetts Department of Environmental Protection (MassDEP). 2007. Commonwealth of Massachusetts – 2006 Air Quality Report. July 2007.

Massachusetts Water Resources Authority (MWRA). 2008. Town of Bedford: Department of Public Works letter. 3 June 2008.  
<http://www.mwra.state.ma.us/annual/waterreport/2007results/letters/bedford.pdf> .

National Resources Conservation Service (NRCS). 2008. Web Soil Survey. Accessed at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.

Town of Bedford (TOB). 2008. Bedford Board of Assessors. Search for Parcels. Accessed at <http://csc-ma.us/PROPAPP/Opening.do?subAction>NewSearch&town=BedfordPubAcc>

Town of Bedford Historical Society (TOB Historical Society). 2008. Map of Historical Properties. Accessed at <http://www.bedfordmahistory.org/index.html>

US Air Force (USAF). 1977. Lease between Massachusetts Port Authority and the United States of America. Lease No. DACA51-5-78-84. December 1977.

US Air Force (USAF). 1995. Environmental Impact Analysis Process (EIAP). Federal Register. Vol. 60, p. 4545. 32 CFR Part 989. January 24, 1995.

United States Census (US Census). 2000. 22<sup>nd</sup> Census of the United States. United States Census Bureau.

United States Geological Survey (USGS). 2008. Geographic Information Systems (GIS) data.

## **7.0 LIST OF PREPARERS**

Metcalf & Eddy|AECOM prepared this document to fulfill the requirements of the National Environmental Policy Act (NEPA) for the proposed action of the decommissioning of the Minuteman Village Mobile Home Park (MVMHP) and the restoration of the site. The following persons authored and provided direct oversight for the preparation of this environmental assessment:

### **MANAGEMENT**

Donald C. Morris, P.E., 66 MSG/CE. B.S. in Civil Engineering; As the Environmental Director, provided technical review and oversight for preparation of the environmental assessment.

### **TASK LEADER**

Conroy, Ed, P.E., M&E|AECOM. B.S. in Civil Engineering & M.S. in Environmental Engineering; As a Project Manager with extensive experience managing environmental support programs and remediation projects, managed the preparation of the environmental assessment.

### **QUALITY ASSURANCE LEADER**

Petras, James. M&E|AECOM. B.S. Biology; As a Senior Environmental Scientist with diverse experience in preparing environmental assessments and impact reports for federal, municipal, and commercial entities, conducted a survey of the parcel and authored the environmental assessment.

### **CONTRIBUTING AUTHORS**

Maravelias, James. M&E|AECOM. B.S. in Business Administration; As an Environmental Scientist with broad experience in the management and regulation of hazardous waste and the U.S. Air Force Environmental Impact Analysis Process (EIAP), provided technical input on selected sections of the environmental assessment.

Litman, Matthew R., Ph.D., P.E. M&E|AECOM. B.S. and M.Eng. in Civil & Environmental Engineering, Ph.D. in Environmental Microbiology; As a senior engineer, provided technical input on selected sections of the environmental assessment.

Best, Thomas. 66 MSG/CE. B.S. in Civil Engineering; As the Environmental Restoration Program manager, assisted in historical research and site assessment for this environmental assessment.

Campbell, Ian. M&E|AECOM. B.S. in Environmental Studies; As a Project Scientist with broad

experience in environmental compliance and air quality permitting, provided input to selected sections of the environmental assessment.

Cravedi, Gregory. 66 MSG/CE. B.S. in Management; As an Environmental Protection Specialist, assisted in historical research, site assessment, and provided technical review of the environmental assessment.

Hoffman, Christina. M&E|AECOM. B.S. Plant Science, Chemistry; As a Project Scientist with extensive experience with environmental compliance and preparing technical and scientific sections of environmental permitting documents, focusing on compliance with the NEPA, provided technical review and quality assurance of the environmental assessment.